



SAVE ENERGY, SAVE MONEY

Heating and cooling can account for nearly half of the energy used in your home. Since these systems generally last 10 years or more, it could be one of the biggest home investments you make. While some ENERGY STAR qualified heating and cooling products may cost more initially, they can yield annual returns of up to 50 percent in lower energy bills.

HELP PROTECT THE ENVIRONMENT

Residential heating and cooling equipment often uses fossil fuel-based energy that contributes to a host of air pollution problems, including smog, acid rain, and global warming. Simply put, the less energy we use in our homes, the less air pollution we generate. If just one household in ten bought heating and cooling equipment that has earned the ENERGY STAR, the change would keep more than 17 billion pounds of greenhouse gases out of our air this year. Buying energy-efficient heating and cooling equipment is one of many ways you can make a difference.

EPA
UNITED STATES
ENVIRONMENTAL
PROTECTION AGENCY
6202 J
WASHINGTON DC 20460
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
RECYCLED/RECYCLABLE — PRINTED
WITH VEGETABLE OIL BASED INKS ON
RECYCLED PAPER (MINIMUM 50%
POST-CONSUMER CONTENT)



CHANGE FOR THE
BETTER WITH
ENERGY STAR

U.S. Environmental
Protection Agency and
U.S. Department
of Energy

Heating & Cooling



EPA 430F-03-020 December 2003

WHAT IS ENERGY STAR®?

ENERGY STAR is a label that identifies products, such as heating and cooling equipment, which meet strict energy efficiency guidelines set by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE).

Products that have earned the ENERGY STAR help you save energy and money without sacrificing performance – one solution to energy supply and cost concerns. By using less energy, these products also help reduce air pollution and global warming associated with energy production.

In addition to heating and cooling equipment, products in more than 40 categories, including lighting, home electronics, appliances, and home office equipment, feature the ENERGY STAR.

ENERGY STAR QUALIFIED HEATING AND COOLING EQUIPMENT

Heating and cooling equipment that has earned the ENERGY STAR combined with properly sealed ducts can save up to 20 percent on energy bills and may also improve the comfort level in your home.

AIR CONDITIONERS

Compared to conventional models, ENERGY STAR qualified central air conditioners and room air conditioners reduce energy waste by at least 25 and 10 percent, respectively. Replacing an old central air conditioner with one that has earned the ENERGY STAR saves about \$60 per year in electricity depending on climate and the size of the unit you're replacing.

BOILERS

A properly sized and installed ENERGY STAR qualified boiler uses about 6 percent less energy than a standard new boiler.

PROGRAMMABLE THERMOSTATS

Programmable thermostats that have earned the ENERGY STAR provide you with more flexibility than standard models and contain no mercury. Properly using a programmable thermostat to consistently control your home's temperature can save you about \$100 every year in energy costs.

AIR-SOURCE/GEOTHERMAL HEAT PUMPS

Electric air-source heat pumps use the difference between indoor and outdoor air temperatures to heat and cool your home. Geothermal heat pumps use stable ground temperatures to provide heating and air conditioning. ENERGY STAR qualified models are 20-30 percent more energy-efficient than standard equipment.

FURNACES

ENERGY STAR qualified furnaces use advanced technology to deliver 15 percent higher efficiency than standard new furnaces available today.

CEILING FANS

ENERGY STAR qualified ceiling fans move air at least 15-20 percent more efficiently than conventional fans. This means you'll use less energy to get the same amount of cooling.

VENTILATION FANS

ENERGY STAR qualified ventilation fans perform better and are typically less noisy than conventional models because they use high-performance motors and a better overall design. Qualified fans consume on average 65 percent less energy than conventional models.

CHANGE TO ENERGY STAR QUALIFIED HEATING AND COOLING



HEATING AND COOLING SYSTEM CHECKLIST

When it's time to install a new heating, ventilation, and air conditioning (HVAC) system, make an educated decision with the help of these simple suggestions:

- ☐ **Find the Right Contractor** – The performance of your new system depends on how well it is installed. Getting the right contractor is key to getting a quality installation. Look for contractors with several years of experience that are licensed and insured (if required). Ask for a written contract of all work and whether a contractor's service technicians are certified by North American Technician Excellence (NATE). NATE is an industry-supported certification for technicians who install and service heating and cooling equipment. Visit www.natex.org to use NATE's contractor locator.
- ☐ **Look for the ENERGY STAR®** – When deciding on an ENERGY STAR qualified system, ask the contractor to estimate your utility bill savings and costs. Although ENERGY STAR qualified equipment may cost more initially, you will be rewarded with savings over its lifetime.
- ☐ **Properly Size and Install Your System** – When replacing heating and cooling equipment, bigger isn't always better. Oversized equipment will cost more up front and to operate over its lifetime. Additionally, it will not dehumidify or provide a comfortable environment like it should. Don't assume your current system is the right size. Ask your contractor to calculate the "size" of the system using Manual J, or an equivalent calculation tool. Today's equipment is more efficient, and your original system may have been sized improperly.

To locate a store near you that carries ENERGY STAR qualified heating and cooling equipment, use our store locator at www.energystar.gov. Just select "products," click on "heating and cooling equipment," choose the item you are interested in, and click on "Find a Store."

As part of a proper installation, a certified technician should:

- Install equipment in easily accessible areas for easy maintenance.
- Test for adequate airflow and verify that the system has been charged with the correct refrigerant level in accordance with the manufacturer's guidelines.
- Conduct a combustion safety test after ducts are sealed to be sure all gas or oil-burning appliances are working properly.
- Replace indoor and outdoor coils for maximum efficiency.

☐ **Seal Your Ducts** – Central air conditioners, heat pumps and furnaces rely on a system of ducts to circulate air throughout your home. It is common to find gaps between duct joints in a home, whether new or old. Ask your contractor to seal and insulate ducts in unconditioned spaces like an attic or crawl-space. Sealing and insulating ducts can improve a heating and cooling system's efficiency by as much as 20 percent. For more information visit www.energystar.gov/ducts.

☐ **Maintain Your System** – Schedule your contractor to do annual check-ups of your heating and cooling system to help prevent future problems and unwanted costs. Also clean or change air filters once a month in your central air conditioner, furnace, and/or heat pump. Your contractor can show you how to do this yourself.

Products that earn the ENERGY STAR prevent greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.

For more information, or to request EPA's *A Guide to Energy-Efficient Cooling and Heating*, visit www.energystar.gov, or call 1-888-STAR-YES (1-888-782-7937).

